

III. CLAIM AMENDMENTS

1.(Currently Amended) A method for the generation of a pseudo-random permutation of an N-digit word in which:

a generalized Feistel scheme is implemented, wherein:

the-round functions of the generalized Feistel scheme implemented are functions (Fi) such that:

the input words of the round functions are produced by a the-conversion of digit words into binary words,

then a one-way function is applied to thethese binary words,

finally, the output in digits is a function of these binary words-;

a digit word to be enciphered is read in a memory,

the generalized Feistel scheme used comprises at least $T = 5$ rounds.

2.(Currently Amended) TheA method according to claim 1, wherein the one-way function on the binary words uses a standard pseudo-random cryptography function on binary words.

3.(Currently Amended) TheA method according to claim 1 wherein the standard pseudo-random function on the binary words uses the SHA-1 function.

4.(Currently Amended) TheA method according to claim 1 wherein the number of rounds T of the Feistel scheme is smaller than or equal to 30.

5.(Currently Amended) TheA method according to claim 1, wherein the number of rounds T of the Feistel scheme is equal to 6.

6.(Currently Amended) TheA method according to claim 1 wherein, during odd-valued rounds of the Feistel scheme, the round function works on a word with a length B, and during even-valued rounds of the Feistel scheme it works on words with a length of A digits, where $A + B = N$.

7.(Currently Amended) TheA method according to claim 6, wherein A is equal to the integer part of $N/2$ and B is equal to $N - A$.

8.(Currently Amended) TheA method according to claim 1, wherein N is an integer contained in the interval $[7, 30]$.

9.(Currently Amended) TheA method according to claim 1, wherein N is an integer contained in the interval $[10, 30]$.

10.(Currently Amended) TheA method according to claim 1, wherein N is an integer contained in the interval $[13, 30]$.